

Environmental Toolbox





General Awareness Training Module

For Soldiers, Sailors, Airmen, Marines, and
everyone in a base camp



Environmental Considerations in Operations (ECOps)

Sound environmental management during military operations helps you and your commander accomplish the mission by enhancing force protection and reducing the logistical burden on the force





Overview of This Briefing

- Your environmental responsibilities
- Why environmental considerations matter
- Examples of good and bad practices
- Handout materials, instructions, education



Your Responsibilities

- Be familiar with policies, standard operating procedures (SOPs), field card instructions, etc.
- Use resources responsibly; use only what is needed
- Put your waste into appropriate containers
- Recycle and reuse when possible
- Handle hazardous material and waste carefully and use personal protection equipment (PPE)
- Conduct regular inspections and checks of your equipment and workspace
- Be prepared to act in case of any environmental incident. Report spills, releases and contamination. Know the procedures!
- Protect natural resources and cultural property
- Ask questions if in doubt

Everyone has responsibility to protect the environment!



Definition

Environmental Considerations in Operations are measures or processes put in place to avoid or minimize potentially adverse environmental impacts during military operations.

Focus areas addressed in this toolbox*:

- Solid waste management
- Hazardous material and hazardous waste management
- Water and wastewater management
- Spill prevention and response planning
- Natural resource and cultural property protection

**Note:* while energy use is not addressed specifically in this toolbox, it is important for everyone to use energy responsibly!



Why ECOps Matters to You

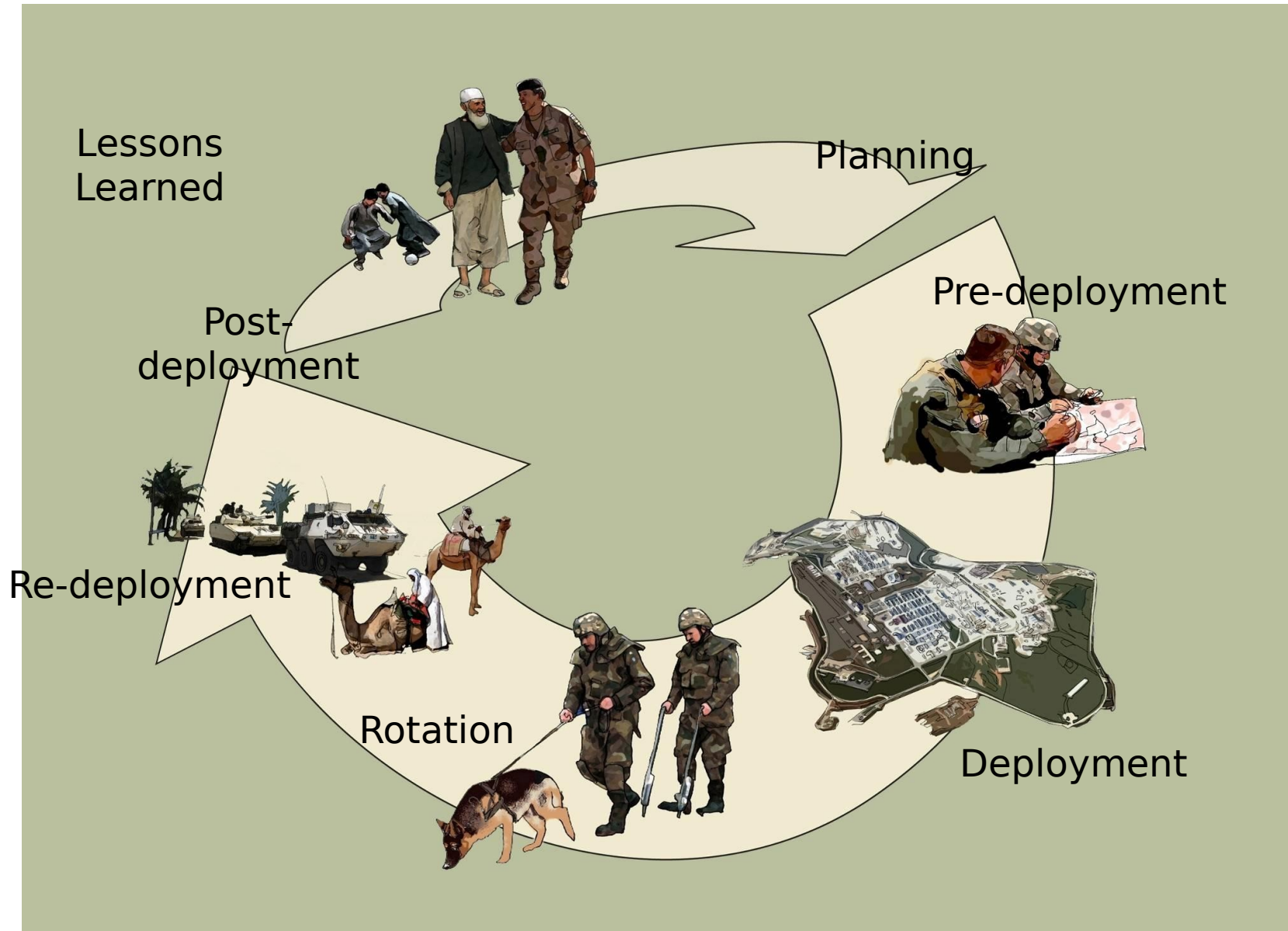
- Protects soldier health
- Reduces number of supply convoys needed
- Reduces logistical requirements and costs
- Reduces legal and financial liability
- Promotes sustainability
 - For the current mission
 - For future deployments
 - For the host nation
- Enhances relations with local community and host nation



Using resources wisely helps improve force protection!



ECOps in the Life Cycle of Military Operations





Personnel Who Provide Environmental Direction

- Commanders (at all levels) – provides command emphasis on the importance of environmental considerations
- Staff Officers – may help integrate environmental considerations
- Environmental Officer - advocates and coordinates ECOps at the tactical level
- Environmental representatives at each unit and activity – carry out specific environmental tasks, as directed by the Commander

ENVIRONMENTAL RESPONSIBILITY STARTS WITH YOU





Good and Bad Examples

The following slides show a number of pictures of both good and bad environmental practices, from camp set-up to handling different kinds of wastes to protecting natural and cultural resources



Bad Hazardous Waste Storage

Drums not labeled, materials not segregated, no secondary containment, no covered storage



No secondary containment; leakage has contaminated soil



Uses secondary containment, but it is too small and not durable. Canisters improperly stored





Good Hazardous Waste Storage

Good secondary containment, but should be labeled and covered



Well marked, fenced off. Good secondary containment, protective gear handy

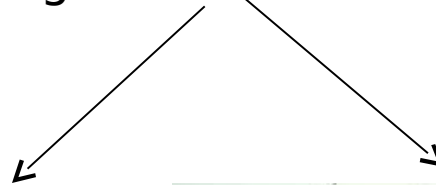


Wastes well marked, segregated; good overhead protection. Secondary containment could be better.



Good Hazardous Waste Storage

Low cost solutions offering good secondary containment, overhead protection, segregated and labeled.

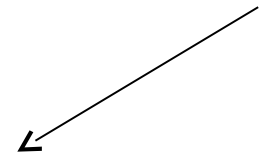




Good Hazardous Waste Storage in Field Conditions



Tarps and sandbags as secondary containment , netting and tarps as overhead protection





Bad Hazardous Material / Waste Storage (Battery Storage)

Batteries leaked acid, no secondary containment



Battery placed on top of crumbling storm water drain





Good Hazardous Material Handling

Use of protective clothing and equipment





Bad Solid Waste Storage

Rusting and leaking
containers



No segregation of
materials





Solid Waste Disposal

Open burn pit often not preferred, but rules are appropriately posted





Incineration



↑
Trash not contained in barrels or bags prior to disposal



Bad Spill Containment

Oil leaking onto ground, no containment or clean-up



Oil contamination; taking samples to determine extent of contamination



Good Spill Response Plan

Spill contained



Oil cleaned up using sand to absorb it

Sand placed in lidded container



Good Spill Response Plan

Instructions posted in proper location, covered in plastic to protect it from weather



Ruptured bladder

Intact bladder



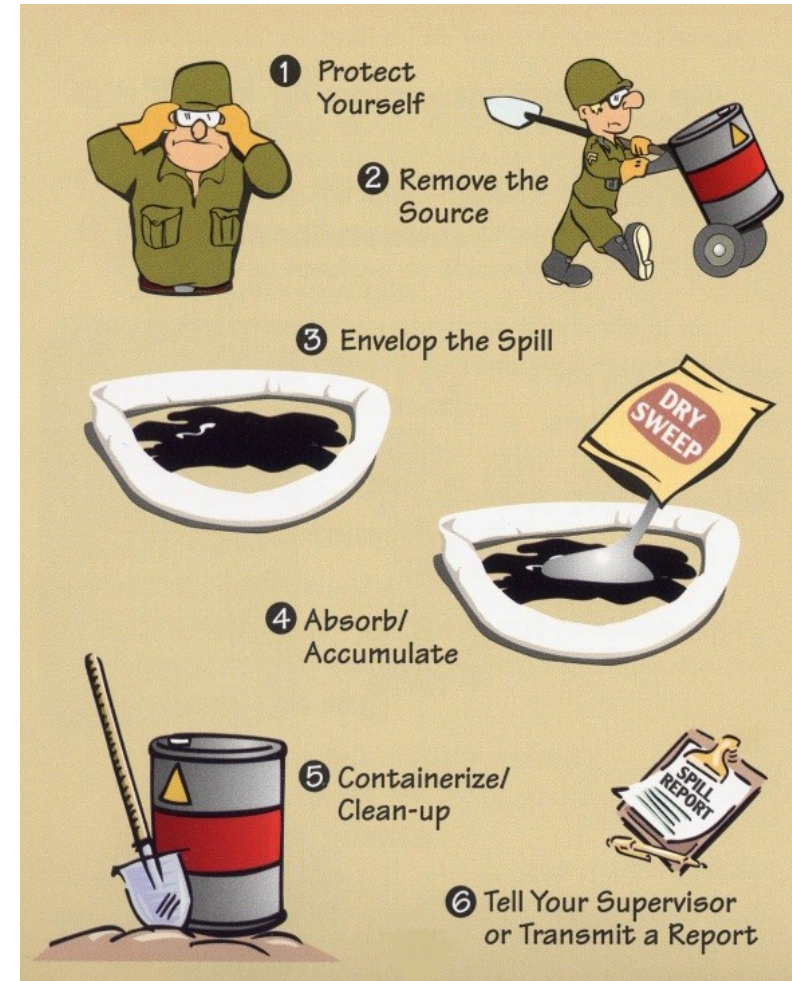
Good containment of oil spill—use of liner and raised sides



What to Do in Case of Spill or Leak?

REACT!

- Remove the source
- Envelop the spill
- Absorb /Accumulate
- Containerize / clean-up
- Tell your supervisor or transmit a Report





Bad Wastewater Disposal

Open dumping of wastewater

Broken waste water pipes



Resulting sewage discharge



Proper Vehicle Procedures



Drive on established roads, except when otherwise instructed



Use only approved vehicle washracks



Don't drive through wetlands



Cultural Property Protection

Damage done to burial site



Proper marking of burial site, old well





Natural Resource Protection





Handout Material, Instructions, Education

The Soldier's Pocket Guide to Environmental Considerations During Military Operations (ECOPS)



**"YOU
SPILL,
YOU
DIG IT"**



**An environmental handbook
for sustained deployment operations**



Conclusion

- Your actions and awareness about environmental considerations during the military operation will ensure your safety and health, proper execution of the mission, protection of the environment, and the wise use of resources
- If you have concerns, comments or suggestions, be sure to let the appropriate people know